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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,938	07/07/2006	Fabrizio Donazzi	09875.0360	8289

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EXAMINER	
NGUYEN, CHAU N	

ART UNIT	PAPER NUMBER
2831	

MAIL DATE	DELIVERY MODE
10/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/565,938	DONAZZI ET AL.	
	Examiner	Art Unit	
	Chau N. Nguyen	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *43-51,53-58 and 62-84* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *43-49,54-58,66,68,69,73,74,76-81 and 84* is/are rejected.

7)☒ Claim(s) *50,51,53,62-65,67,72,75,82 and 83* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/17/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 63 is objected to because of the following informalities: Claim 63 should be changed to depend on claim 62, otherwise "said predetermined length" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 43-49, 54-58, 66, 68, 69, 73, 74, 76-81 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siewerth et al. (DE 2710620) in view of Shuji (JP 08-331729).

Siewerth et al. discloses an electrical power transmission line comprising at least one electrical cable, at least one shielding element (1) comprising a plurality of shielding modules (3) arranged side by side, each shielding modules being made of at least one ferromagnetic material arranged in a radially outer position with respect to the at least one cable for shielding the magnetic field generated by the cable, each of the plurality of shielding modules comprising a base and a cover. Siewerth et al. also discloses that the at least one cable comprises three cables arranged according to a trefoil arrangement (re claim 44), the line is placed underground (re claim 45), the base and the cover are substantially continuous (re claim 46), the base comprises a bottom wall and a pair of side walls (re claim 47), the bottom wall and the pair of side walls are substantially flat (re claim 48), the side walls extend in a direction substantially perpendicular to the bottom wall (re claim 49), the cover is substantially continuous (re claim 54), the cover comprises a main wall and a pair of flanges extending from the main wall in a predetermined

direction (the flanges being in the same plane with the main wall) (re claim 55), and claim 84 is a method counterpart of claim 43.

Siewerth et al. does not disclose at least one supporting element coupled to at least one of the bases. Shuji discloses a shielding module comprising a base (3) and a cover (4), wherein at least one supporting element (1) is coupled to the base. It would have been obvious to one skilled in the art to couple a supporting element as taught by Shuji to each of the bases of Siewerth et al. to provide supporting means and protecting means for the base (re claims 43 and 66).

Re claim 56, it would have been obvious to one skilled in the art to modify the flanges of Siewerth et al. to extend in a direction substantially perpendicular to the main wall as taught by Shuji (FIG. 2) to secure the cover to the base. The modified line of Siewerth et al. would have the base and the cover with respective sides superimposed for a portion of predetermined length in lateral direction (re claim 58).

Re claim 57, it would have been obvious to one skilled in the art to provide suitable thickness for the base and the cover of Siewerth et al. to meet the specific use of the resulting device since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Re claims 68 and 69, it would have been obvious to one skilled in the art to use material having suitable permeability to meet the specific use of the resulting line of Siewerth et al. since it has been held that where the general conditions of a claim are disclosed by the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Re claims 73 and 74, Shuji discloses a supporting element (2) coupled to the cover (4) and arranged in a radially outer position with respect to the at least one shielding element. It would have been obvious to one skilled in the art to provide a supporting element coupled to at least one of the covers of Siewerth et al. to provide a protecting means for the cover as taught by Shuji.

The modified line of Siewerth et al. would have at least one shielding module being interposed between a pair of supporting elements (re claim 76), the supporting element being substantially flat (re claim 77), the supporting element being made of an electrically non-conductive and non-ferromagnetic material (re claim 79) which is plastic material (re claim 80).

Re claim 78, it would have been obvious to one skilled in the art to provide suitable thickness for supporting element (of Shuji) in the modified line Siewerth et al. to meet the specific use of the resulting device since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering

the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Re claim 81, it would have been obvious to one skilled in the art to use polyethylene for the supporting element (of Shuji) in the modified line of Siewerth et al. since polyethylene is a well-known plastic material for being used in the cable art.

4. Claims 70 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siewerth et al. in view of Shuji as applied to claim 43 above, and further in view of Sefko et al. (4,447,795).

Claims 70 and 71 additionally recite the ferromagnetic material being grain oriented silicon steel, wherein the silicon content is about 1% to about 5%. Sefko et al. discloses web magnetic cores. Sefko et al. discloses that grain oriented silicon steel with the silicon content about 1% to about 5% is one of many known ferromagnetic materials. It would have been obvious to one skilled in the art to use the ferromagnetic material as taught by Sefko et al. for the ferromagnetic material of Siewerth et al. to provide suitable permeability for the shielding element.

Allowable Subject Matter

5. Claims 50, 51, 53, 62-65, 67, 72, 75, 82 and 83 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: claims 50, 51, 53, 62-65, 67, 82 and 83 are allowed in view of the Terminal Disclaimer filed on 7/17/2008, which is proper and has been recorded. Re claims 72 and 75, the prior art of record does not teach or suggest an electrical power transmission line comprising all the features as recited in the claims and in combination with each base being made of a first ferromagnetic material having a maximum value of relative magnetic permeability μ_{max} greater than about 40 and each cover being made of a second ferromagnetic material having a maximum value of relative magnetic permeability μ_{max} greater than about 20 (re claim 72) and with the at least one supporting element being arranged in a radially inner position with respect to the at least one shielding element (re claim 75).

Response to Arguments

7. Applicant's arguments with respect to claims 43 and 84 have been considered but are moot in view of the new ground(s) of rejection.

Summary

8. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 7/17/2008 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutiérrez can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chau N Nguyen/
Chau N Nguyen
Primary Examiner
Art Unit 2831